## What is claimed is:

1. A light-emitting device comprising:

a plurality of electrode layers, including an anode layer and a cathode layer; an electro-luminescent organic layer disposed between the anode and cathode layers; and

a poly-siloxane insulating structure separating the electro-luminescent organic layer into a plurality of light-emitting elements.

- 2. The device of claim 1 further comprising at least one other organic layer disposed adjacent to the electro-luminescent organic layer, the at least one other organic layer configured to perform one or more of the following functions: hole injection, hole transportation, electron injection, and electron transportation.
- 3. The device of claim 1 wherein the poly-siloxane insulating structure separates the electro-luminescent layer into a plurality of pixels.
- 4. The device of claim 1 wherein the poly-siloxane insulating structure comprises a thin sheet of poly-siloxane material having a plurality of apertures, and wherein each of the anode layer and cathode layer comprises a plurality of electrode strips arranged such that the anode layer electrode strips and the cathode layer electrode strips coincide at regions corresponding to apertures of the poly-siloxane insulating structure.
- 5. The device of claim 4 wherein at least one electrode layer is configured to independently address at least one aperture of the poly-siloxane insulating structure as a

display pixel, and wherein the at least one electrode layer is further arranged in an active matrix configuration.

- 6. The device of claim 1 wherein the poly-siloxane insulating structure forms a bank structure that insulates the plurality of light-emitting elements from each other.
- 7. The device of claim 1 further comprising one or more insulating strips on the poly-siloxane insulating structure, and wherein at least one insulating strip comprises an overhanging portion or a base portion or both.
- 8. The device of claim 7 wherein the at least one insulating strip comprises poly-siloxane material in one or both of the overhanging portion and the base portion.
  - 9. A method of constructing a light-emitting device, the method comprising: forming a first electrode layer on a substrate;

forming on the first electrode layer a poly-siloxane bank structure having apertures;

depositing one or more organic layers into the apertures of the poly-siloxane bank structure; and

forming a second electrode layer such that the one or more organic layers deposited into the apertures are disposed between the first and second electrode layers.

- 10. The method of claim 9 wherein depositing one or more organic layers comprises depositing an electro-luminescent organic layer.
- 11. The method of claim 10 wherein depositing one or more organic layers comprises depositing at least one other organic layer disposed adjacent to the electro-

luminescent organic layer, wherein the at least one other organic layer comprises an organic layer configured to perform one or more of the following functions: hole injection, hole transportation, electron injection, and electron transportation.

- 12. The method of claim 11 wherein the at least one other organic layer comprises a conductive polymer.
- 13. The method of claim 9 further comprising patterning the poly-siloxane bank structure to separate the light-emitting device into a plurality of pixels.
- 14. The method of claim 9 wherein forming the poly-siloxane bank structure comprises forming a thin sheet of poly-siloxane material having a plurality of apertures, each aperture corresponding to an individual light-emitting element.
- 15. The method of claim 9 wherein each of the first electrode layer and the second layer are formed as a plurality of electrode strips arranged such that the first electrode layer strips coincide with the second electrode layer strips at regions corresponding to the poly-siloxane bank structure's apertures.
- 16. The method of claim 9 wherein forming the first electrode layer further comprises arranging the first electrode layer to independently address at least one aperture of the poly-siloxane bank structure.
- 17. The method of claim 16 wherein arranging the first electrode layer further comprises configuring the first electrode layer as an active matrix.

- 18. The method of claim 9 wherein depositing the one or more organic layers comprises one or more of spin-casting, dip-coating, screen printing, flexo printing, and ink-jet printing.
- 19. The method of claim 9 wherein the poly-siloxane bank structure is formed before the one or more organic layers are deposited.
- 20. The method of claim 9 wherein one or more organic layers are deposited before the poly-siloxane bank structure is formed.
- 21. The method of claim 9 further comprising forming one or more insulating strips on the poly-siloxane bank structure.
- 22. The method of claim 21 wherein the one or more insulating strips are formed on the poly-siloxane bank structure between apertures.
- 23. The method of claim 22 wherein at least one insulating strip comprises an overhanging portion or a base portion or both.
- 24. The method of claim 23 wherein the at least one insulating strip comprises poly-siloxane in one or both of the overhanging portion and the base portion.
- 25. An organic light-emitting device (OLED) comprising:
  a plurality of light-emitting elements, each light-emitting element comprising an electroluminescent material disposed between electrode elements; and

at least one structure comprising poly-siloxane material, wherein the structure is configured to separate elements of the OLED.

- 26. The OLED of claim 25 wherein the at least one structure comprises a poly-siloxane bank structure configured to separate light-emitting elements from each other.
- 27. The OLED of claim 26 wherein the poly-siloxane bank structure includes apertures into which light-emitting elements are arranged.
- 28. The OLED of claim 26 wherein the poly-siloxane bank structure physically and electrically insulates the light-emitting elements from each other.
- 29. The OLED of claim 26 further comprising one or more insulating strips configured to separate electrode elements of the OLED.
- 30. The OLED of claim 29 wherein at least one insulating strip comprises an overhanging portion or a base portion or both.
- 31. The OLED of claim 29 wherein the at least one insulating strip comprises poly-siloxane material in one or both of the overhanging portion and the base portion.
- 32. The OLED of claim 25 wherein the at least one structure comprises one or more insulating strips configured to separate electrode elements of the OLED.
- 33. The OLED of claim 32 wherein at least one insulating strip insulates neighboring electrode elements from each other.